

[illegible]

January 25, 2010 12:49:05 PM



Abstract



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Req'd Qty: 4.00[illegible]

Date:

**Insp.
Stamp**

Rev B

0.00

00000000000000000000

Large Fab

Large Fab

Memo

0.00

Large Fab

Weld assembly as per dwg D3463 using DT8875

SM
10-02-01

4 G/L 10 01 28

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

QC

Memo

0.00

Quality Control

PD 10.01.28 (5)

120

QC5- Inspect part completeness to step on W/O

0.00

00000000000000000000

QC

Memo

0.00

Quality Control

$\rightarrow S_{10/02/61}$

74
1246

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55620

January 25, 2010 12:49:05 PM



Page 2

Item ID: D3463-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Weldment Assembly

Start Date: 1/25/10 Start Qty: 4.00



Cust Item ID:

Required Date: 2/01/10 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel Memo 1- Mask areas indicated on dwg D3463 (holes, threads) START TIME: 9:00AM OVEN TEMPERATURE: 4009- FINISH TIME: 9:30AM	0.00 0.00							
	M11B170			⇒ M		X4	φ		
140 HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch	0.00							
	Memo	0.00							
	13545			BL		④	φ		
150 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							
				SB		4	φ		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55620

January 25, 2010 12:49:05 PM



Page 3

Item ID: D3463-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Weldment Assembly

Start Date: 1/25/10 Start Qty: 4.00



Cust Item ID:

Required Date: 2/01/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: <i>487</i>	0.00							
	Packaging	0.00							
	Memo								
	Packaging								
170	QC21- Final Inspection - Work Order Release	0.00							
	QC	0.00							
	Memo								
	Quality Control								

*10/2/3 (4)**10/02/03*
MF 10-2-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 25, 2010 12:49:09 PM

Page 1

Work Order ID: 55620

Parent Item: D3463-042

Parent Item Name: Step Weldment Assembly


Comments: IPP REV. A 05.11.18 new issue EC

Start Date: 1/25/10

Required Date: 2/01/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
238-806  SS DOWEL PIN 1" LONG		Purchased	No			100	Each	68.0000	8.0000			

Cpl 10 01 27

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 68

105037 3

111088 61

19080 4

D3453-3



Clevis

Manufactured No

100

Each

12.0000

4.0000



1/3

Cpl 10 01 27

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 12

46262 2

52983 10

D3453-5



Plug

Manufactured No

100

Each

31.0000

4.0000



1/2 2

Cpl 10 01 27

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 31

46151 3

46265 18

52985 10

1/3 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 25, 2010 12:49:09 PM

Work Order ID: 55620



Parent Item: D3463-042



Parent Item Name: Step Weldment Assembly

Start Date: 1/25/10

Required Date: 2/01/10

Comments: IPP REV. A 05.11.18 new issue EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3463-1		Manufactured	No			100	Each	4.0000	4.0000			
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Arm

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

4

— 46148 —

4

(4) ✓

D3463-3		Manufactured	No			100	Each	62.0000	4.0000			
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Step

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

62

— 46149 —

15

46269

47

(4) ✓

D3463-5		Manufactured	No			100	Each	9.0000	8.0000			
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End Cap

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

9

— 46270 —

9

(8) ✓

Pl 10 01 27

Pl 10 01 27

Pl 10 01 27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 25, 2010 12:49:09 PM

Work Order ID: 55620



Parent Item: D3463-042



Parent Item Name: Step Weldment Assembly

Start Date: 1/25/10

Required Date: 2/01/10

Comments: IPP REV. A 05.11.18 new issue EC

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3463-7		Manufactured	No			100	Each	6.0000	4.0000			
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Drag Arm

Handwritten: 10 01 27

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

6

54593

6

Handwritten: 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

DART

CONTROLLED COPY

NO AMENDMENT

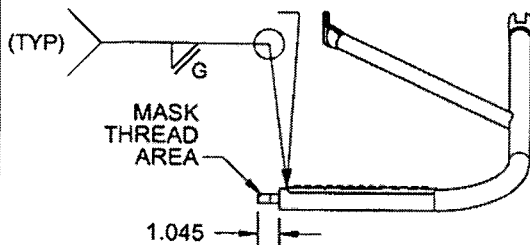
WITHOUT NOTICE

WORK ORDER

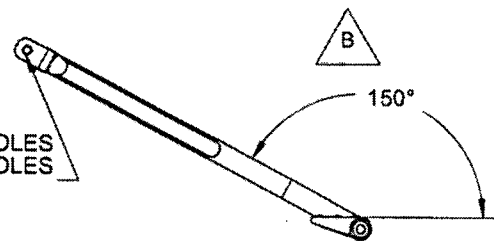
NO. 55620

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3463	REV. B SHEET 1 OF 4
DATE 05.12.05	TITLE STEP WELDMENT		SCALE 1:8
A	05.09.20	NEW ISSUE	
B	05.12.05	REVISE DIM.; D3463-5 WAS D3463-5F	

INSTALL P/N 238-806
DOWEL PIN

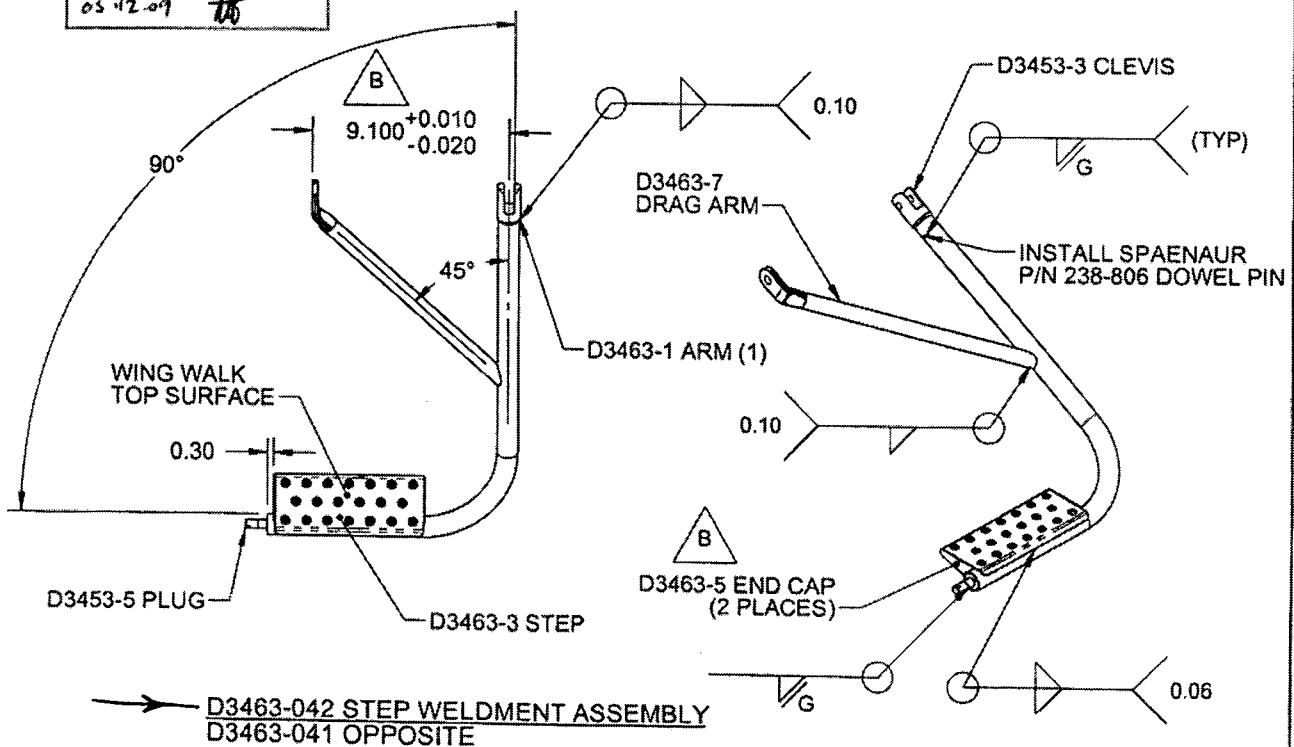


CONCENTRIC HOLES
MASK HOLES



RELEASED

05.12.09



NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 6) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

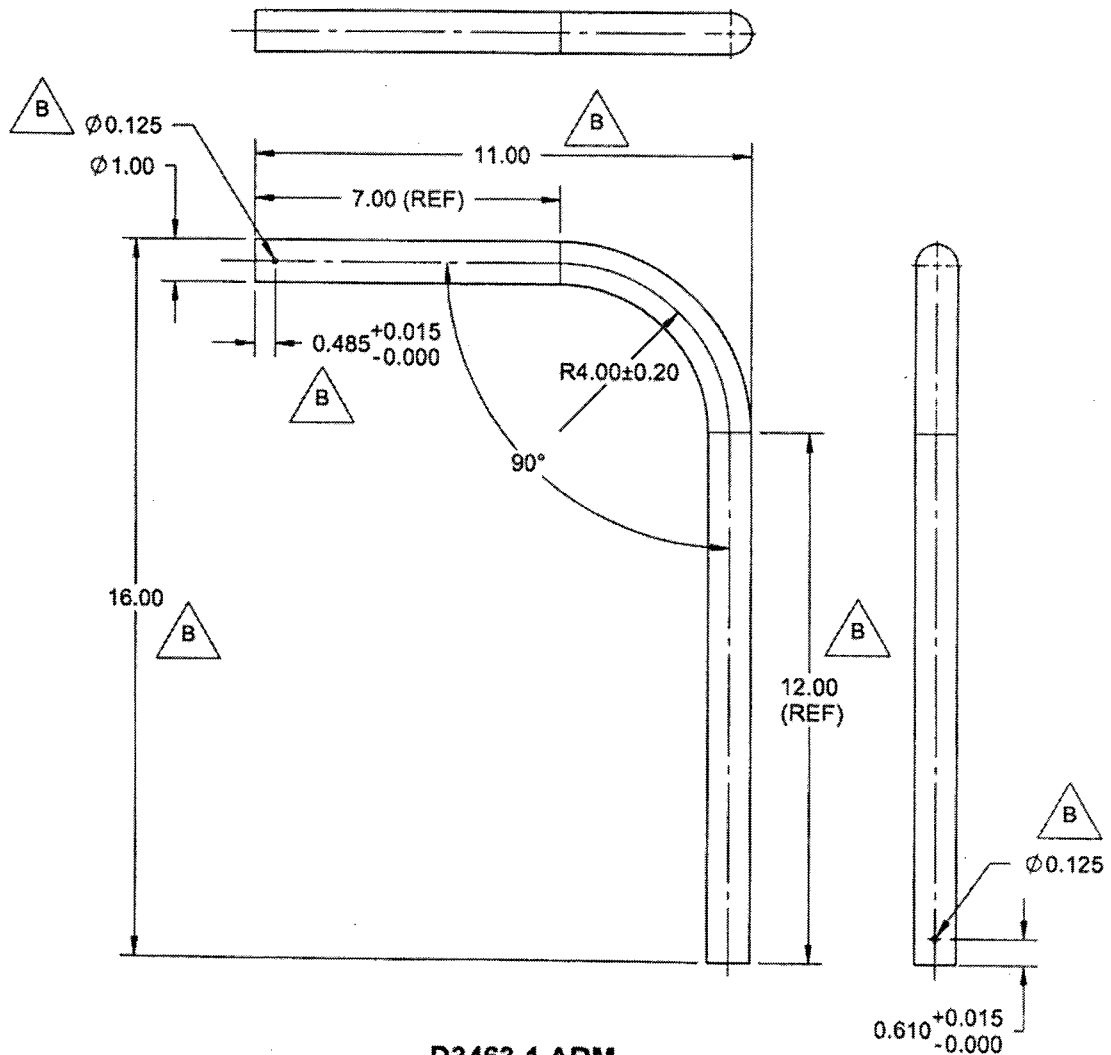
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

w/o 55620

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3463	REV. B SHEET 2 OF 4
DATE 05.12.05		TITLE STEP WELDMENT	SCALE 1:4

RELEASED05.12.09 *[Signature]***D3463-1 ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR1.000W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

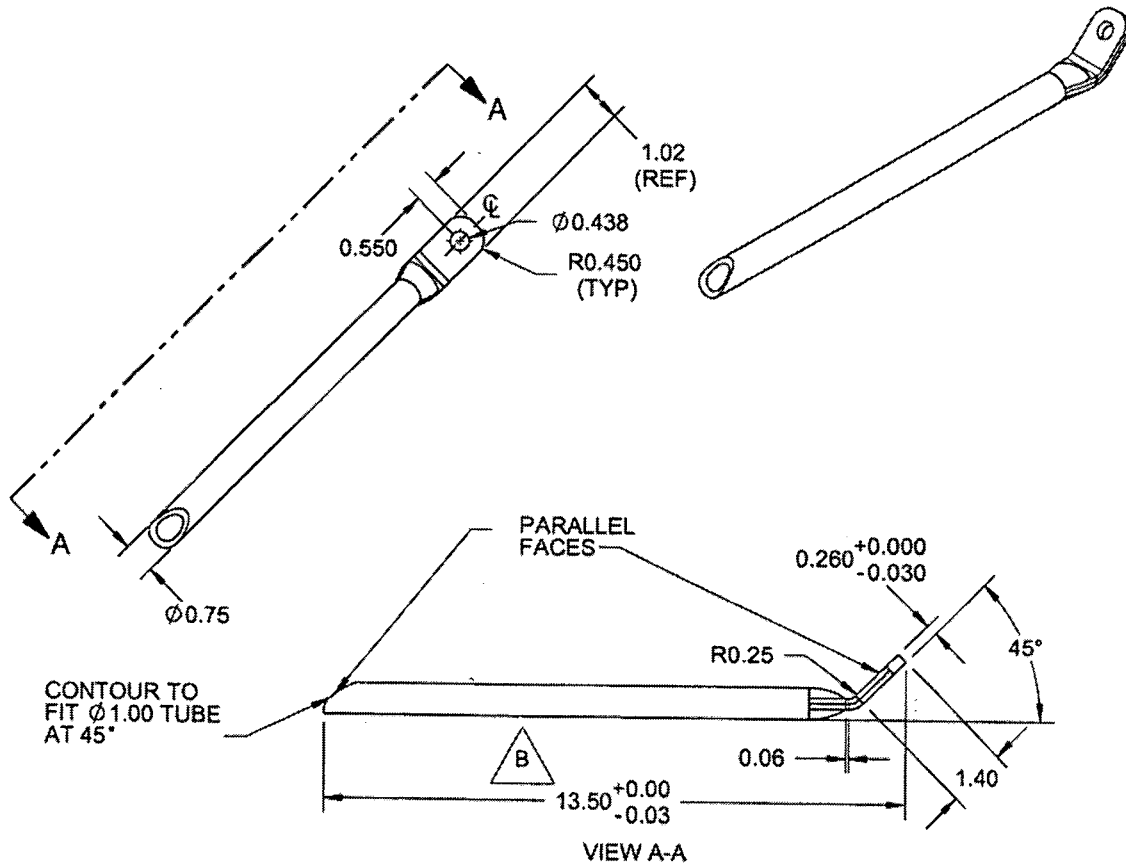
DART

w/o 55620

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3463	REV. B SHEET 3 OF 4
DATE 05.12.05		TITLE STEP WELDMENT	SCALE 1:4

RELEASED

05.12.09 #

**D3463-7 DRAG ARM****NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC. M304TR0.750W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

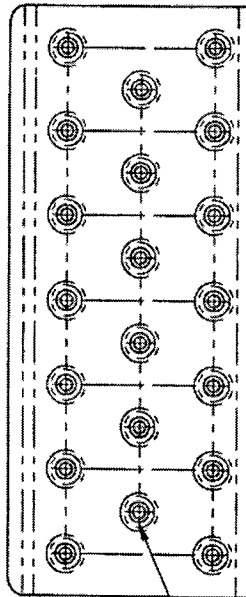
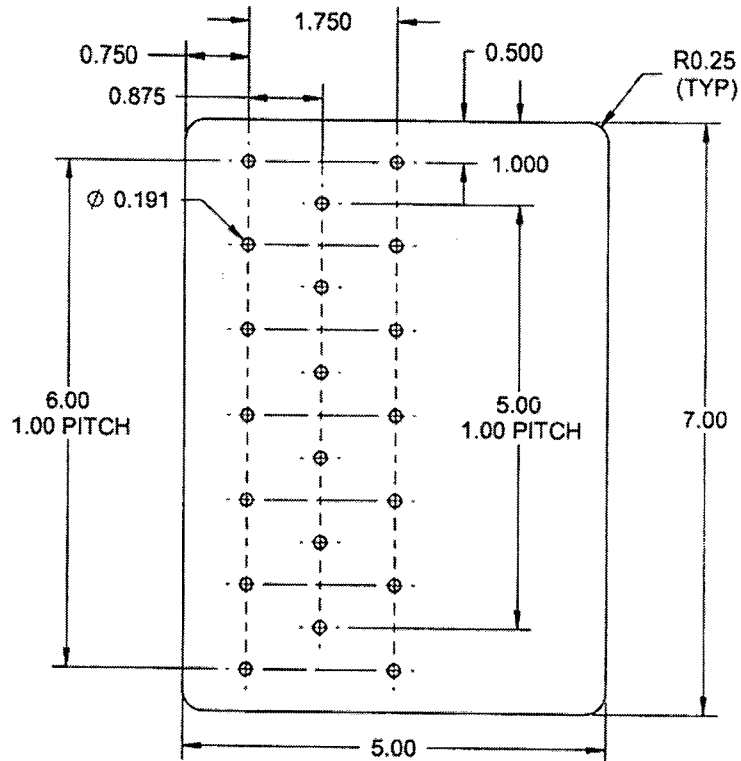
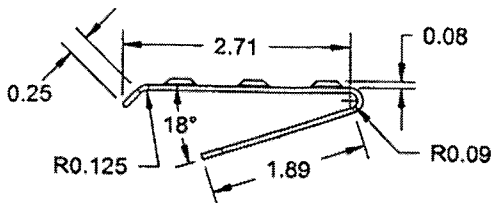
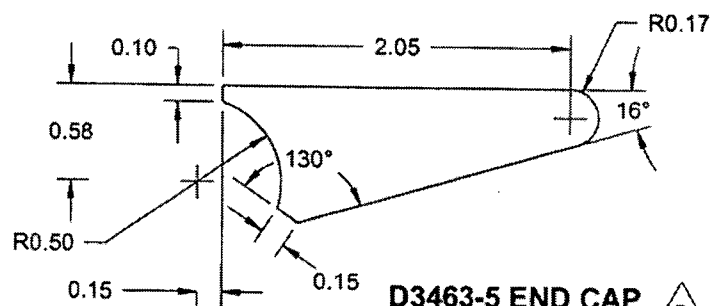
NOTE: Date & initial all entries

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3463	REV. B SHEET 4 OF 4
DATE 05.12.05		TITLE STEP WELDMENT	SCALE 1:2

RELEASED

05.12.09 #

FORM USING
D3463-3T1**D3463-3F FLAT PATTERN****D3463-3 STEP****D3463-5 END CAP**
SCALE 1:1**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.060 THICK (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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